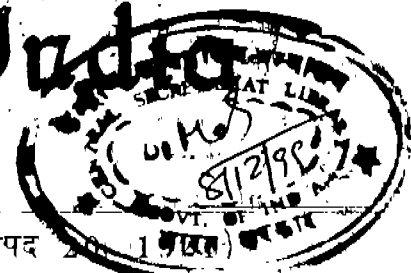




# भारत का राजपत्र The Gazette of India

प्राधिकार से प्रकाशित  
PUBLISHED BY AUTHORITY



सं० 37] नई दिल्ली, शनिवार, भितम्बर 11, 1999 (भद्रपद 20, 1921)  
No. 37] NEW DELHI, SATURDAY, SEPTEMBER 11, 1999 (BHADRA 20, 1921)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके  
[Separate paging is given to this Part in order that it may be filed as a separate compilation]

## भाग III—खण्ड 2 [PART III—SECTION 2]

पेटेंट कार्यालय द्वारा जारी की गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचनाएँ और नोटिस  
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Calcutta, 11th September 1999

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Besant Nagar, Chennai-600 090.

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Karnataka, Kerala, Tamilnadu &  
Pondicherry and the Union  
Territories of Laccadive, Minicoy  
and Aminidivi Islands.

Telegraphic address "PATENTOFFIS"  
Phone No. 490 1495  
Fax No. 044 490 1492.

Patent Office, (Head Office),  
"NIZAM PALACE", 2nd M.S.O.  
Building, 5th, 6th & 7th  
Floors, 234/4, Acharya Jagadish  
Bose Road, Calcutta-700 020.

Rest of India

Telegraphic address "PATENTIS"  
Phone No. 247 4201  
Fax No. 033 247 3851.

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## एकल तथा अधिकांश

कलकत्ता, दिनांक 11 सितम्बर 1999

पेटेंट कार्यालय के कार्यालयों के पते एवं क्षेत्राधिकार

पेटेंट कार्यालय का प्रधान कार्यालय कलकत्ता में अवस्थित है तथा मुम्बई, दिल्ली एवं बर्लिन में इसके शाखा कार्यालय हैं, जिनके प्रादेशिक क्षेत्राधिकार जोन के आधार पर निम्न रूप में वितरित हैं :—

पेटेंट कार्यालय शाखा, टांजी इस्टेट,  
तीसरा तल, लोअर परले (प.),  
मुम्बई-400 013.

गुजरात, महाराष्ट्र, मध्य प्रदेश  
तथा गोंया राज्य क्षेत्र एवं संघ  
शासित क्षेत्र, दमन तथा दीव एवं  
दावर और नगर हवेली।

तार पता - "पेटेंटोफिस"

फोन 4825092 फैक्स : 0224950622

पेटेंट कार्यालय शाखा,  
एकक सं. 401 से 405, तीसरा तल  
नगरपालिका बाजार भवन,  
सरस्वती मार्ग, कराँल बाग,  
नई दिल्ली-110 005.

हरियाणा, हिमाचल प्रदेश, जम्मू  
तथा कश्मीर, पंजाब, राजस्थान,  
उत्तर प्रदेश तथा दिल्ली राज्य  
क्षेत्री एवं संघ शासित क्षेत्र चंडीगढ़।

तार पता - "पेटेंटोफिस"

फोन : 5782532 फैक्स : 011-5766204

## पेटेंट कार्यालय शाखा,

विंग सी (सी-4, ए)

तीसरा तल, राजाजी भवन, बसन्त नगर,  
बर्लिन-600090।

आन्ध्र प्रदेश, कर्नाटक, केरल, तमिलनाडु  
तथा पाण्डिचेरी राज्य क्षेत्र एवं  
संघ शासित क्षेत्र, लक्षद्वीप, मिन्निकाय  
तथा एमिनिदिवि द्वीप।

तार पता - "पेटेंटोफिस"

फोन : 4901495 फैक्स : 044-4901492

पेटेंट कार्यालय (प्रधान कार्यालय)  
निजाम पैलेस, द्वितीय बहुतलीय कार्यालय  
भवन, 5, 6 तथा 7वां तल,  
234/4, आचार्य जगदीश बोस मार्ग,  
कलकत्ता-700 020.

भारत का कवर्ण क्षेत्र।

तार पता - "पेटेंट्स"

फोन : 2474401 फैक्स : 033-2473851

पेटेंट कार्यालय का कलकत्ता स्थित प्रधान कार्यालय पेटेंट  
सहयोग संधि के अधीन अन्तरराष्ट्रीय आवेदनों के लिए रिसीविंग  
कार्यालय, इलेक्ट्रेड कार्यालय व डीसिनेटेड कार्यालय है।

पेटेंट अधिनियम, 1970 तथा पेटेंट (संशोधन) अधिनियम,  
1999 अथवा पेटेंट (संशोधन) नियम, 1972 द्वारा अपेक्षित  
सभी आवेदन, सूचनाएँ, विवरण या अन्य दस्तावेज या कोई  
फॉर्म पेटेंट कार्यालय में केवल समुचित कार्यालय में ही ग्रहण  
किये जायेंगे।

शुल्क : शुल्कों की अदायगी या तो नकद की जाएगी अथवा  
जहाँ उपयुक्त कार्यालय अवस्थित है उस स्थान की अनुसूचित बैंक  
से नियंत्रक को भुगतान योग्य बैंक ड्राफ्ट अथवा चैक द्वारा की  
जा सकती है।

APPLICATION FOR THE PATENT FILED AT THE  
HEAD OFFICE  
234/4, ACHARYA JAGADISH BOSE ROAD,  
CALCUTTA-700 020

The dated shown in the crescent brackets are the dated  
claimed under section 135, under Patent Act, 1970.

14-07-1999

627/Cal/99. Siemens Aktiengesellschaft, "Arrangement and  
method for sale procedure control". (Convention  
No. 19836079.7 on 30-7-98 in Germany).

628/Cal/99. RXS Kabelgarnituren GMBH, "Link element  
for bridging the separating point of a divided seal  
in a cable fitting". (Convention No. 19842422.1  
on 16-9-98 in Germany).

15-07-1999

629/Cal/99. Uni-Charm Corporation, "Sanitary Napkin".  
(Convention No. 10-205616 on 21-7-98 in Japan).

16-07-1999

630/Cal/99. Samsung Electronics Co. Ltd., "Processing  
packet data in mobile communication system".  
(Convention No. 28975/1998 on 16-7-98; 32352/  
1998 on 5-8-98 and 33360/1998 on 14-8-98 in  
Korea).

19-07-1999

631/Cal/99. Fogal Aktiengesellschaft, "Slipper". (Convention  
No. 198 34 910.6 on 3-8-98 in Germany).

632/Cal/99. Arzneimittelwerk Dresden GmbH, "Process for  
the production of active ingredient composition  
with controlled release from a matrix". (Con-  
vention No. 19729487.1 on 10-7-97 in Germany).

633/Cal/99. Arzneimittelwerk Dresden GmbH, "Novel 1-AR  
(ALK) ylimidazolin-2-ones having anticonvulsive  
activity which contain a disubstituted radical in  
the 4-position and process for their preparation".  
(Convention No. 19532668.7 on 5-9-95 in Ger-  
many).

634/Cal/99. ASTA Medica AG, "Novel LH-RH antagonists  
having improved action". (Convention No.  
19544212.1 on 28-11-95 in Germany).

635/Cal/99. ASTA Medica AG, "Targeted cytotoxic anthra-  
cycline analogs". (Convention No. 08/562. 652  
on 27-11-95 in USA).

636/Cal/99. Pouyet S.A., "An optical fiber cable inlet device".  
(Convention No. 98.10172 on 4-8-98 in France).

637/Cal/99. Pouyet S.A., "A device for interconnecting opti-  
cal fiber cables". (Convention No. 98.10171 on  
4-8-98 in France).

638/Cal/99. Patent-Treuhand-Gesellschaft Fuer Elektrische  
Gluehlampen MBH, "Improved Starting circuit  
for low-pressure discharge lamp". (Convention  
No. 19838830.6 on 26-8-98 in Germany).

## ALTERATION OF DATES UNDER SECTION 16

183119

(778/Cal/97) Antedated to 30th April, 1997.

## COMPLETE SPECIFICATION ACCEPTED

Notice is hereby given that any person interested in opposing the grant of a patent on any of the applications concerned, may, at any time within four months from the date of this issue or within such further period not exceeding one month if applied for on Form 4 prescribed under the Patent (Amendment) Rules, 1999 before the expiry of the said period of four months, give notice to the Controller of Patents at the appropriate office on the prescribed Form 7 of such opposition. The written statement of opposition should be filed in duplicate alongwith evidence, if any, with said notice or within sixty days of its date as prescribed in Rule 36 as amended by the Patents (Amendment) Rules, 1999.

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Printed copies of the specification and drawings, if any, can be supplied by the Patent Office or its branch offices on payment of prescribed charges of Rs. 30/- each.

In the event of non-availability of printed specification, photocopies of the specification and drawings, if any, can be supplied by the Patent Office and its branch offices on payment of prescribed photocopy charges @ Rs. 10/- per page of such document plus Rs. 30/-

## स्वीकृत सम्पूर्ण विनिर्देश

एतद्वारा यह सूचना दी जाती है कि संबंध आवेदनों में से किसी पर पेटेंट अनुदान को विरोध करने के इच्छुक व्यक्ति, इसके निर्गम की तिथि से चार (4) महीने या अधिक ऐसी अवधि जो उक्त चार (4) महीने की अवधि की समाप्ति के पूर्व, पेटेंट (संशोधन) नियम, 1999 के तहत विहित प्ररूप 4 पर अगर आवेदित हो, एक महीने की अवधि से अधिक न हो, के भीतर कभी भी नियन्त्रक एक्सक को उपयुक्त कार्यालय में ऐसे विरोध की सूचना विहित प्ररूप 7 पर दी जा सकती है। विरोध संबंधी लिखित वक्तव्य की प्रतियों में साक्ष्य की साथ, यदि कोई हो, उक्त सूचना के साथ या पेटेंट (संशोधन) नियम, 1999 द्वारा संशोधित नियम 36 के तहत यथाविहित उक्त सूचना की तिथि से 60 दिन के भीतर फाइल कर दिये जाने चाहिए।

प्रत्येक विनिर्देश के संदर्भ में नीचे दिये वर्गीकरण, भारतीय वर्गीकरण तथा अन्तर्राष्ट्रीय वर्गीकरण के अनुरूप हैं।

विनिर्देश तथा चित्र आराख, यदि कोई हो, की अंकीत प्रतियों की आपूर्ति पेटेंट कार्यालय या उसके शाखा कार्यालयों से यथाविहित 30/- रुपये प्रति की अदायगी पर की जा सकती है।

ऐसी परिस्थिति में जब विनिर्देश की अंकीत प्रति उपलब्ध नहीं हो, विनिर्देश तथा चित्र आराख, यदि कोई हो, की प्रतियों की आपूर्ति पेटेंट कार्यालय या उसके शाखा कार्यालयों से यथाविहित प्रतिलिपि शुल्क उक्त दस्तावेज के 10 रुपये प्रति पृष्ठ भन 30/- रुपये की अदायगी पर की जा सकती है।

CL : 27 B

183111

Int. Cl. : E 04 H 15/00.

## A COLLAPSIBLE SHELTER.

Applicant & Inventor : MARK CLAYTON CARTER, OF 10131 KERNWOOD COURT ALTA LOMA, CALIFORNIA 91737, UNITED STATES OF AMERICA

Application No. 233/Cal/1994 filed on 5th April 1994

Appropriate Office for Opposition Proceedings (Rule 4, Patent Rule 1972) Patent Office, Calcutta

## 7 Claims

A collapsible shelter (10) comprising :

A canopy (12) having at least three sides (14) and at least three corners (16) ;

at least three vertically disposed legs (18) supporting said canopy (12), with one of said legs (18) disposed under each of said canopy corners (16), each of said legs (18) having an upper end (20) and a lower end (22) ;

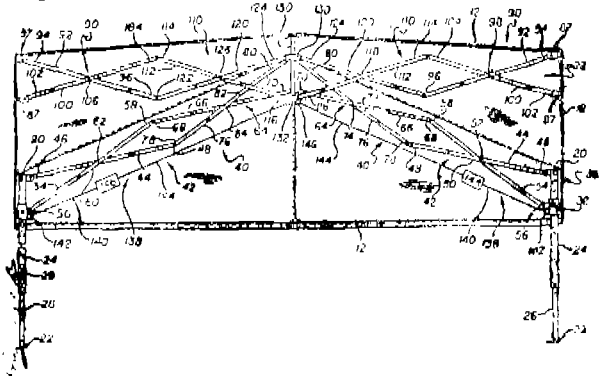
at least two perimeter truss pairs (42, 64) of link members (44, 54, 66, 76) formed of X-shaped linkages connected to each of said legs (18), each of said perimeter truss pairs of link members having first (44, 66) and second (54, 76) link members, said first link members (44) of a first perimeter truss pair (42) having an outer end (46) connected to the upper end (20) of one said leg (18), and said second link members (54) of the first perimeter truss pair (42) having an outer end (56) slidably connected to said leg (18); and

at least two central truss pairs (90, 110) of link members (92, 100, 112, 120) formed of X-shaped linkages, each said central truss pairs (90, 110) of link members having first (92, 112) and second (100, 120) link members connected together in a scissors configuration, each of said central truss pairs (90, 110) being connected to the inner ends (70, 80) of at least one said perimeter truss pair (64);

said collapsible shelter being characterised by :

said first (44, 66) and second (54, 76) link members of each of said perimeter truss pairs (42, 64) of link members being pivotally connected together in a scissors configuration so as to be extendable above said legs (18) by compression of said outer ends (46, 56) of said perimeter truss pairs of link members, and said first (92, 112) and second (100, 120) link members of each of said central truss pairs (90, 110) of link members being pivotally connected together in a scissors configuration so as to be extendable above the upper ends (20) of the legs (18);

FIG 2



Compl. Specn. 21 Pages;

Drgns, 5 Sheets.

Cl. : 128 G

183112

Int. Cl. : A 61 L 31/00

**A PROCESS TO PREPARE A COMPOSITE SURGICAL MATERIAL.**

Applicant : JOHNSON & JOHNSON MEDICAL, INC., OF 2500 ARBROOK BOULEVARD, ARLINGTON, TEXAS-76004 UNITED STATES OF AMERICA.

Inventors :

WILSON HARVEY.  
NICHOLAS D. LIGHT.  
CARLA A. HAYNES.

Application No. 590/Cal/1994 filed on 25th July, 1994.

(Convention No 9315614.9 on 28-07-93 &amp; 9319273.0 on 17-9-93 in U.K.)

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Calcutta.

**9 Claims**

A process to prepare a composite surgical material comprising the steps of :

providing a layer of a synthetic bioabsorbable material;  
providing a dispersion of collagen in an oil-in-water emulsion wherein the weight ratio of collagen to oil in the said emulsion is from 10:1 to 1:10;

coating at least one face of the layer of synthetic bioabsorbable material with the said dispersion; and drying the composite material thus obtained.

Compl. Specn. 12 Pages;

Drgns. 2 Sheets.

Cl. : 50 B

183113

Int. Cl. : F 24 F 1/00, 13/08

**A CONTROL DEVICE FOR CONTROLLING COOLING AIR IN AN AIR CONDITIONER.**

Applicant : GOLDSTAR CO. LTD., OF 20, YOIDO-DONG, YONGDUNGPO-KU, SEOUL KOREA.

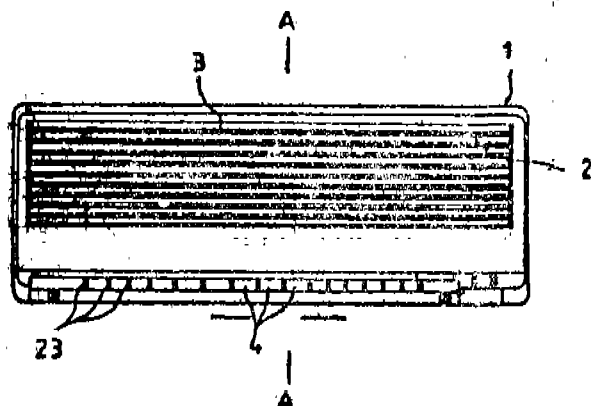
Inventor : IN-HEE PARK.

Application No. 940/Cal/94 filed on 10th November, 1994.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Calcutta.

**6 Claims**

A control device for controlling discharge direction of cooling air in an air conditioner comprising a plurality of wind direction control blades (43) and a blade direction control unit (40) connected to said control blades, said control blades having respective hinge shafts (43b) rotatably mounted in corresponding hinge through holes (42a) in a bottom support (42), characterised by a fixing bracket (50) fitted over said hinge shafts for preventing vibration of said blades, and a plurality of stoppers (60) fitted on said hinge shafts under the fixing bracket for preventing separation of said bracket from said hinge shafts.



Compl. Specn. 14 Pages;

Drgns. 3 Sheets.

Cl. : 206 E

183114

Int. Cl. : H 04 B 1/60

**AN INTERFACE APPARATUS FOR CONVEYING TRANSPORT PACKET SIGNALS ON A BI-DIRECTIONAL AVD BUS.**

Applicant : THOMSON CONSUMER ELECTRONICS, INC., OF 10330 NORTH MERIDIAN STREET, INDIANAPOLIS, INDIANA 46290-1024, UNITED STATES OF AMERICA.

Inventors :

MICHAEL SCOTT DEISS.  
CHARLES BAILEY NEAL.

Application No. 204/Cal/1995 filed on 28th February, 1995.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Calcutta.

**4 Claims**

An interface apparatus for conveying transport packet signals on a bi-directional AVD bus to respective AVD components, said interface comprising :

a source of compressed signal occurring in MPEG-like transport packets;

a system clock.

a Modulo M counter for counting pulses of said system clock and providing count values;

means for capturing a count value at a predetermined instant associated with a respective MPEG like transport packet;

a for matter to format the superpacket coupled to said source said means for capturing a count value and said AVD bus, for assembling a superpacket including a captured count value and associated MPEG like transport packet in mutually exclusive portions of said superpacket, and applying said superpacket to said AVD bus.

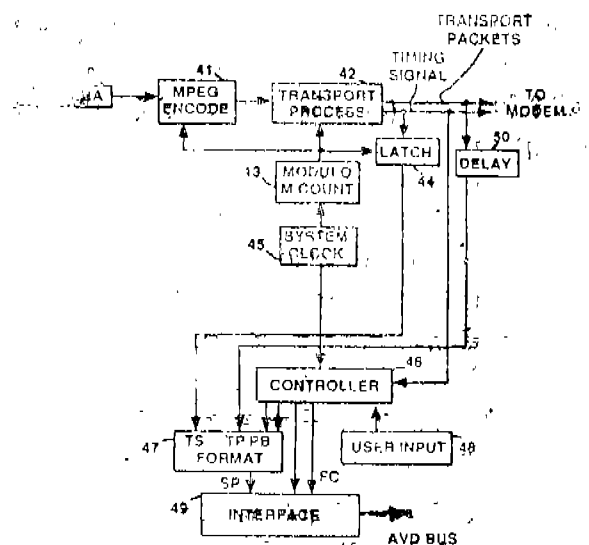


FIG. 4

Compl. Specn. 14 Pages;

Drgns. 4 Sheets.

Cl. : 32 F 3 (b)

183115

Int. Cl. : C 07 C 51/42

**METHOD FOR RECOVERING CARBOXYLIC ACIDS FROM AN AQUEOUS SOLUTION.**

Applicant : GLITSCH, INC., OF 4900 SINGLETON BOULEVARD, DALLAS, TEXAS 75212 UNITED STATES OF AMERICA.

Inventors :

JOSEPH CHARLES GENTRY.  
JOHN CARL MCINTYRE.  
TIMOTHY L. HOLMES.  
RONALD G. GUATY.

Application No. 304/Cal/95 filed on 20th March, 1995.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Calcutta.

33 Claims

A method for recovering carboxylic acids from an aqueous solution containing at least one acid from the group consisting of carboxylic acids having from one to ten carbon atoms comprising,

contacting said aqueous solution with solvent consisting essentially of mixed trialkylphosphine oxides such as herein described at a temperature between 35°C and 90°C in counter-current liquid-liquid extraction flow in a contacting step to thereby transfer said acids from said aqueous solution to said solvent, thereby producing a raffinate relatively low in acid content and a solvent relatively rich in acid content, said acid rich solvent containing some water;

dehydrating said rich solvent by applying heat thereto to separate water therefrom in a dehydration step thereby producing a water stream and a dehydrated rich solvent stream; and

stripping the acids from said dehydrated rich solvent stream in a stripping step performed at a temperature of from 250°C to 300°C at the hottest region of said stripping step, to produce a recycle solvent consisting essentially of mixed trialkylphosphine oxides for recycle to said liquid-liquid extraction flow and an acid stream containing said acids.

Compl. Specn. 24 Pages;

Drgns. 2 Sheets.

Cl. : 5 C

183116

Int. Cl. : B 24 D 13/20

WHEEL MOUNTED POWERED TEA HARVESTER.

Applicant & Inventor : YOSHIMI MATSUMOTO, OF 1388-3, EICHO-KOHRU, IBUSUKIGUN KAGOSHIMA-KEN JAPAN.

Application No. 492/Cal/95 filed on 2nd May, 1995.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Calcutta.

9 Claims

A wheel mounted powered tea harvesting machine comprising as gate-shaped frame having a pair of lower side frames (B1 & B2) and a pair of upper side frames (A1 & A2), the front end of each lower side frame provided with a front wheel (R) each while the rear end of each lower side frame provided with a rear wheel (S) each, the gate frame also having rotatable threaded vertical rods (J1 & J2) between the lower side frame and the upper side frame, a set of height adjusting holders (K1 & K2) engaged on said rods so that the height of the holders can be lowered or raised by rotating the threaded vertical rods (J1 & J2) by means of a handle (I) through a bevel gear a cutting blade unit (M) being held to said height adjusting holders (K1 & K2) such that the level of the cutting blade unit (M) can be raised or lowered along with the holder, in air blower (N) attached to an operating engine (O) for operation of the blower (N) and the cutting blade unit (M), said cutting blade unit (M) having a rotatable cutting blade housed therein and engaged to the shaft driven by engine power, means for coupling the motive power unit for operating the rear

wheels (S) of the machine, a harvested tea leaf collecting plate provided at the back of the cutting blade with a harvested tea leaf collecting bag (Q) said air blower (N) adopted blow air through the cutting blade to push the tea leaves deep into the collecting bag (Q), which cut leaves are pushed and transferred to the collecting bag (Q) by a leaf transferring device.

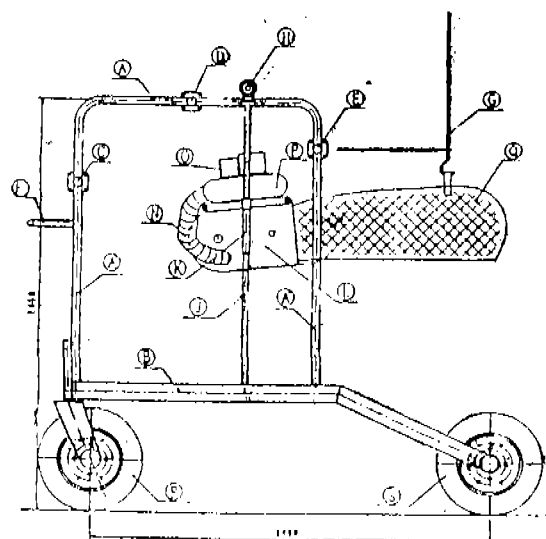


FIG-1

Compl. Specn. 11 Pages;

Drgns. 3 Sheets.

Cl. : 50 E 2

183117

Int. Cl. : F 28 F 1/20

STIRLING COOLER.

Applicant : HOLLANDSE SIGNAALAPPARATEN B.V., OF ZUIDELIJKE HAVENWEG 40, 7550-GD HENGLO, THE NETHERLANDS.

Inventors : ANTONIUS ADRIANUS JOHANNES BENSCHOP.

Application No. 859/Cal/95 filed on 25th July, 1995.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Calcutta.

6 Claims

Stirling cooler, comprising a compressor for generating a time-varying pressure in a gaseous medium, a cooling element provided with at least a displacer and at least a regenerator and additionally comprising a connecting line between the compressor and the cooling element, provided with heat flow-reduction means for reducing the heat flow from the compressor to the cooling element, characterized in that the heat flow-reduction means comprise at least one additional regenerator positioned in the connecting line.

Compl. Specn. 15 Pages;

Drgns. 3 Sheets.

Cl. : 152 F.

183118

Int. Cl. : C 08 L 51/02.

PROCESS FOR PREPARING BIODEGRADABLE FOAMED PLASTIC MATERIALS.

Applicant : NOVAMON S.P.A., OF 31, FORO BUONAPARTE, 20121 MILANO, ITALY.

## Inventors

CATIA BASTIOLI  
VITTORIO BELLOTTI  
GIANFRANCO DEL TREDICI  
ALESSANDRO MONTINO  
ROBERTO PONTI

Application No. : 905/Cal/95 filed on 4th August, 1995.

Appropriate Office for Opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

## 14 Claims

Process for preparing biodegradable foamed plastic materials having a bulk density value comprised within the range of from 5 to 13 kg/m<sup>3</sup>, and a corresponding specific density equal or lower than 32 kg/m<sup>3</sup>, comprising :

- from 30 to 99.5% by weight of thermoplastic starch or of thermoplastic starch containing less than 50 of a cellulosic product, or of starch complexed with natural or synthetic polymeric structures, wherein said starch has;
- an intrinsic viscosity lower than 1.3 dl/g;
- an ethanol soluble fraction of 25°C lower than 20% by weight;
- from 0.5 to 70% by weight of one or more thermoplastic polymers, such as herein described, wherein at least 10% of this fraction is constituted by a thermoplastic polymer (A) which is soluble in starch, or (B) which is capable of complexing starch; and

- (a) from 0 to 20% by weight of water, said process comprising the steps of extruding, at a temperature comprised within the range of from about 150 to 200°C, a composition comprising from 30 to 99.5% by weight of starch or starch containing less than 50% of cellulosic products from 0.5 to 70% of a thermoplastic polymer, of which at least 10% is constituted by (A) a polymer soluble in starch, or (B) a polymer capable of complexing starch; and from 0 to 20% by weight of water added to the water contained in the starch used as the starting material, until an intrinsic viscosity of starch is obtained, which is comprised within the range of from 1.5 to 8 dl/g; and

- (b) foaming the foamable pellets deriving from the preceding step carried out on a single-screw extruder capable of supplying a specific energy higher than

$$0.1 \text{ kWh/kg} - \frac{T - 200}{5} \times 0.01$$

wherein T is the temperature at the extruder's head, for residence times of the molten material longer than

$$\frac{140 \cdot L/D}{30}$$

seconds where L/D is the length/diameter ratio of the screw and for temperatures (T) at the head of the extruder within the range from room temperature to 240°C.

(Compl. Specn. : 30 pages;

Drgns. : 1 sheet)

Cl. : 55 E 4.

183119

Int. Cl. : A 61 K 31/13.

PROCESS FOR PREPARING/NOVEL CLASSES OF COMPOUNDS WHICH ARE INHIBITORS OF INTERLEUKIN-1B CONVERTING ENZYME "ICE".

Applicant : VERTEX PHARMACEUTICALS INCORPORATED, OF 40 ALLSTON STREET, CAMBRIDGE, MASSACHUSETTS 02139-4211 UNITED STATES OF AMERICA.

## Inventors

GUY WILLIAM BEMIS  
JULIAN MARIAN CHARLES GOLEC  
DAVID JEFFREY LAUFFER  
MICHAEL DAVID MULLICAN  
MARK ANDREW MURCKO  
DAVID JERRY LIVINGSTON

Application No. : 778/Cal/97 filed on 30th April, 1997.

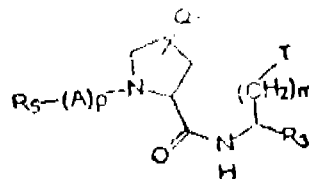
(Convention No. : 08/405581; on 17-3-95; in U.S.A.), 08/440898; on 25-5-95 in U.S.A.).

(Divided out of No. : 659/Cal/95; antedated to 12-6-95).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

## 3 Claims

A process for preparing a compound represented by the formula :



reins:

m is 0, 1, or 2

T is -CO<sub>2</sub>H, or any biosteric replacement for -CO<sub>2</sub>H

R<sub>3</sub> is

-CN,

-CO-R<sub>13</sub>, or

-CO-CO-N(R<sub>5</sub>)(R<sub>10</sub>);

R<sub>5</sub> is selected from the group consisting of:

-R<sub>1</sub>,

-Ar<sub>1</sub>,

-CO-Ar<sub>1</sub>,

-SO<sub>2</sub>-Ar<sub>1</sub>,

-R<sub>9</sub>,

-CO-R<sub>9</sub>,

-CO-O-R<sub>9</sub>,

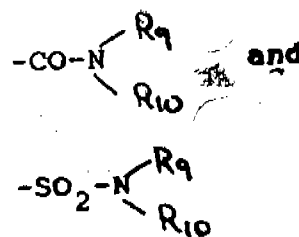
-SO<sub>2</sub>-R<sub>9</sub>,

-CO-N(R<sub>10</sub>)(Ar<sub>1</sub>),

-CO-N(R<sub>10</sub>)(R<sub>9</sub>),

-SO<sub>2</sub>-N(R<sub>10</sub>)(Ar<sub>1</sub>),

-SO<sub>2</sub>-N(R<sub>10</sub>)(R<sub>9</sub>).



each A is independently selected from the group consisting of any  $\alpha$ -amino acid;

p is 2 or 3;

each  $R_9$  is a C1–6 straight or branched alkyl group optionally singly or multiply substituted by  $-\text{OH}$ ,  $-\text{F}$ , or  $-\text{O}$  and optionally substituted with one  $\text{Ar}_1$  group, wherein the alkyl group is optionally unsaturated;

each  $T_1$  is independently selected from the group consisting of :

of :

$-\text{CH}=\text{CH}-$ ,

$-\text{O}-$ ,

$-\text{S}-$ ,

$-\text{SO}-$ ,

$-\text{SO}_2-$ ,

$-\text{NR}_{10}-$ ,

$-\text{NR}_{10}-\text{CO}-$ ,

$-\text{CO}-$ ,

$-\text{O}-\text{CO}-$ ,

$-\text{CO}-\text{O}-$ ,

$-\text{CO}-\text{NR}_{10}-$ ,

$-\text{OCO}-\text{NR}_{10}-$ ,

$-\text{NR}_{10}-\text{CO}-\text{O}-$ ,

$-\text{NR}_{10}-\text{CO}-\text{NR}_{10}-$ ,

$-\text{SO}_2-\text{NR}_{10}-$ ,

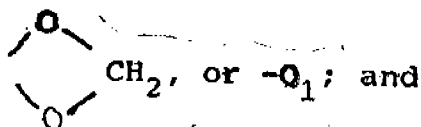
$-\text{NR}_{10}-\text{SO}_2-$ , and

$-\text{NR}_{10}-\text{SO}_2-\text{NR}_{10}-$ ;

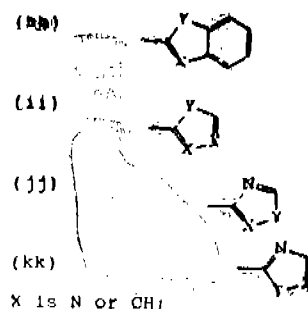
each  $R_{10}$  is independently selected from the group consisting of  $-\text{H}$  or a  $-\text{C}_1$ –6 straight or branched alkyl group;

$R_{13}$  is independently selected from the group consisting of H,  $R_9$ ,  $\text{Ar}_2$ , and  $-\text{CH}_2-\text{TIR}_9$ ;

each  $\text{Ar}_1$  is a cyclic group independently selected from the set consisting of an aryl group which contains 6, 10, 12, or 14 carbon atoms and between 1 and 3 rings, a cycloalkyl group which contains between 3 and 15 carbon atoms and between 1 and 3 rings, said cycloalkyl group being optionally benzofused, and a heterocycle group containing between 5 and 15 ring atoms and between 1 and 3 rings, said heterocycle group containing at least one heteroatom group selected from  $-\text{O}-$ ,  $-\text{S}-$ ,  $-\text{SO}_2-$ ,  $=\text{N}-$ , and  $-\text{NH}-$ , said heterocycle group optionally containing one or more double bonds, said heterocycle group optionally comprising one or more aromatic rings, and said cyclic group optionally being singly or multiply substituted by  $-\text{NH}_2$ ,  $-\text{CO}_2\text{H}$ ,  $\text{Cl}$ ,  $-\text{F}$ ,  $-\text{Br}$ ,  $-\text{I}$ ,  $-\text{NO}_2$ ,  $-\text{CN}$ ,  $=\text{O}$ ,  $-\text{OH}$ ,  $-\text{perfluoro C}_{1-3}$  alkyl,



each  $\text{Ar}_2$  is independently selected from the following group, in which any ring may optionally be singly or multiply substituted by  $-\text{Q}_1$  or  $\text{Q}_2$ ;



y is o or S;

each  $\text{Q}_1$  is independently selected from the group consisting of :

of :

$-\text{Ar}_1$

$-\text{O}-\text{Ar}_1$

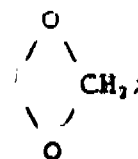
$-\text{R}_9$ ,

$-\text{T}_1-\text{R}_9$ , and

$-(\text{CH}_2)_{1, 2, 3}-\text{T}_1-\text{R}_9$ ;

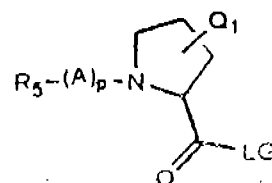
each  $\text{Q}_2$  is independently selected from the group consisting of  $-\text{OH}$ ,  $-\text{NH}_2$ ,  $-\text{CO}_2\text{H}$ ,  $-\text{C}_1$ ,  $-\text{F}$ ,  $-\text{Br}$ ,  $-\text{I}$

$-\text{NO}_2$ ,  $-\text{CN}$ ,  $-\text{CF}_3$ , and



provided that when  $-\text{Ar}_1$  is substituted with a  $\text{Q}_1$  group which comprises one or more additional  $-\text{Ar}_1$  groups, said additional  $-\text{Ar}_1$  groups are not substituted with  $\text{Q}_1$ ; comprising the steps of :

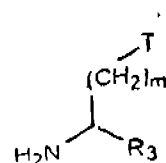
(a) reacting a compound of formula I :



wherein :

LG is an appropriate leaving group that is optionally generated in situ; and

the other variables are as defined above; with a compound of formula II :



wherein :

the NH<sub>2</sub> of formula (I) is optionally protected; and

the other substituents are as defined above; in the presence of an inert solvent and a coupling agent and optionally in the presence of a deprotecting agent; and

(b) optionally comprising the further step of reacting the compound formed in step (a) in an inert solvent in the presence of a deprotecting agent.

(Compl. Specn. : 281 pages;

Drgns. : nil)

Cl. : 55 E 4.

183120

Int. Cl.<sup>7</sup> : A 61 K 31/13.

# PROCESS FOR PREPARING INHIBITORS OF SERINE PROTEASES, PARTICULARLY HEPATITIS C VIRUS NS3 PROTEASES.

Applicant : VERTEX PHARMACEUTICALS INCORPORATED, OF 130, WAVERLY STREET, CAMBRIDGE, MASSACHUSETTS 02139-4242, UNITED STATES OF AMERICA.

Inventors :

ROGER DENNIS TUNG  
SCOTT LEE HARBESON  
DAVID D. DEININGER  
MARK ANTHONY MURCKO  
GOVINDA RAO BHISETTI  
LUC JACQUES FARMER

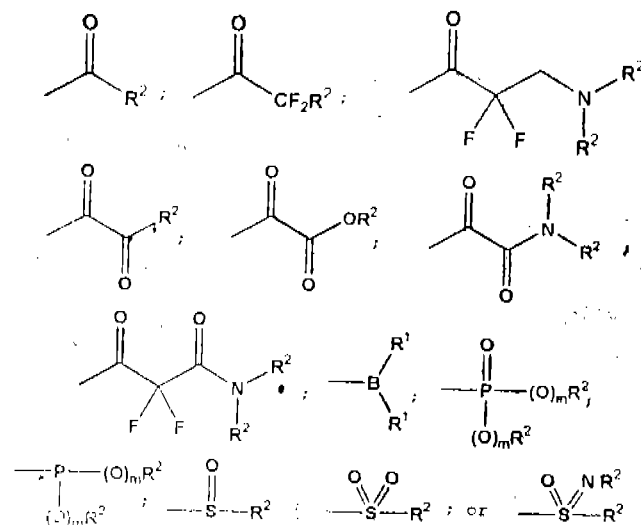
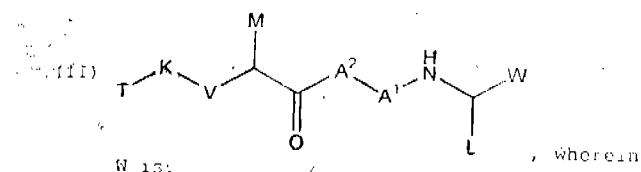
Application No. : 1951/Cal/97 filed on 17th October, 1997.

(Convention No. : 60/028,290; on 18-10-96; in U.S.A.).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

34 Pages

1. A process for preparing a compound of the formula (II) :



each R<sup>1</sup> is hydroxy, alkoxy, or aryloxy, or each R<sup>1</sup> is an oxygen atom and together with the boron, to which they are each bound, form a 5-7 membered ring, wherein the ring atoms are carbon, nitrogen, or oxygen;

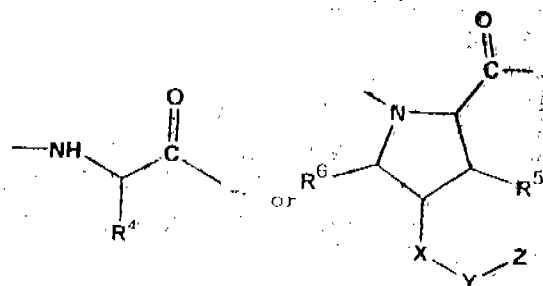
each R<sup>2</sup> is independently hydrogen, alkyl, alkenyl, aryl, aralkyl, aralkenyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, heterocyclyl, heterocyclylalkyl, heterocyclylalkenyl, heteroaryl, or heteroaralkyl, or two R<sup>2</sup> groups, which are bound to the same nitrogen atom, form together with that nitrogen atom, a 5-7 membered monocyclic heterocyclic ring system; wherein any R<sup>2</sup> carbon atom is optionally substituted with J;

J is alkyl, aryl, aralkyl, alkoxy, aryloxy, aralkoxy, cycloalkyl, cycloalkoxy, heterocyclyl, heterocyclyloxy, heterocyclylalkyl, keto, hydroxy, amino, alkylamino, alkanoylamino, aroylamino, aralkanoylamino, carboxy, carboxyalkyl, carboxamidoalkyl, halo, cyano, nitro, formyl, acyl, sulfonyl, or sulfonamido and is optionally substituted with 1-3 J<sup>1</sup> groups;

J<sup>1</sup> is alkyl, aryl, aralkyl, alkoxy, aryloxy, heterocyclyl, heterocyclyloxy, keto, hydroxy, amino, alkanoylamino, aroylamino, carboxy, carboxyalkyl, carboxamidoalkyl, halo, cyano, nitro, formyl, sulfonyl, or sulfonamido;

L is alkyl, alkenyl, or alkynyl, wherein any hydrogen is optionally substituted with halogen, and wherein any hydrogen or halogen atom bound to any terminal carbon atom is optionally substituted with sulkydryl or hydroxy;

A<sup>1</sup> is a bond.



R<sup>1</sup> is alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heterocyclylalkyl, heteroaryl, heteroaralkyl, carboxyalkyl, or carboxamidoalkyl, and is optionally substituted with 1-3 J groups;

R<sup>5</sup> and R<sup>6</sup> are independently hydrogen, alkyl, alkenyl, aryl, aralkyl, aralkenyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, heterocyclyl, heterocyclylalkyl, heteroaryl, or heteroaralkyl and is optionally substituted with 1-3 J groups;

X is a bond, —C(H)(R<sup>7</sup>)—, —O—, —S—, or —N(R<sup>7</sup>)—;

R<sup>7</sup> is hydrogen, alkyl, alkenyl, aryl, aralkyl, heterocyclyl, heterocyclylalkyl, heteroaryl, or heteroaralkyl, and is optionally substituted with 1-3 J groups;

R<sup>8</sup> is hydrogen, alkyl, aryl, aralkyl, heterocyclyl, heterocyclylalkyl, heteroaryl, heteroaralkyl, aralkanoyl, heterocycloalkenyl, heteroaralkanoyl, —C(O)R<sup>10</sup>, —SO<sub>2</sub>R<sup>10</sup>, or carboxamido and is optionally substituted with 1-3 J groups; or R<sup>8</sup> and Z, together with the atoms to which they are bound, form a nitrogen containing mono- or bicyclic ring system optionally substituted with —3 J groups;

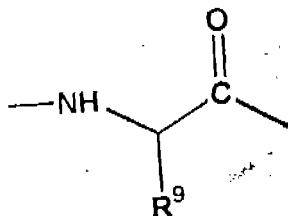
R<sup>10</sup> is alkyl, aryl, aralkyl, heterocyclyl, heterocyclylalkyl, heteroaryl, or heteroaralkyl;



Y is a bond,  $-\text{CH}_2-$ ,  $-\text{C}(\text{O})-$ ,  $-\text{C}(\text{O})\text{C}(\text{O})-$ ,  $-\text{S}(\text{O})-$ ,  $-\text{S}(\text{O})_2-$ , or  $-\text{S}(\text{O}) (\text{NR}^7)-$ , wherein  $\text{R}^7$  is defined above;

Z is alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heterocyclalkyl, heterocyclalkylalkyl, heteroaryl, heteroaralkyl,  $-\text{OR}^2$ , or  $-\text{N}(\text{R}^2)_2$ , wherein any carbon atom is optionally substituted with J, wherein  $\text{R}^2$  is as defined above;

$\text{A}^2$  is a bond or



$\text{R}^9$  is alkyl, cycloalkyl, aryl, aralkyl, heterocyclalkyl, heterocyclalkylalkyl, heteroaryl, heteroaralkyl, carboxyalkyl, or carboxamidoalkyl, and is optionally substituted with 1–3 J groups;

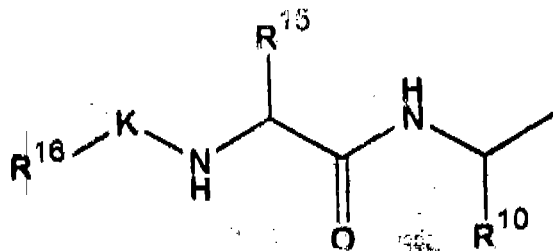
M is alkyl, cycloalkyl, aryl, aralkyl, heterocyclalkyl, heterocyclalkylalkyl, heteroaryl, or heteroaralkyl, optionally substituted by 1–3 J groups, wherein any alkyl carbon atom may be replaced by a heteroatom;

V is a bond,  $-\text{CH}_2-$ ,  $-\text{C}(\text{H}) (\text{R}^{11})-$ ,  $-\text{O}-$ ,  $-\text{S}-$ , or  $-\text{N}(\text{R}^{11})-$ ;

$\text{R}^{11}$  is hydrogen or  $\text{C}_{1-7}$  alkyl;

K is a bond,  $-\text{O}-$ ,  $-\text{S}-$ ,  $-\text{C}(\text{O})-$ ,  $-\text{S}(\text{O})-$ ,  $-\text{S}(\text{O})_2-$ , or  $-\text{S}(\text{O}) (\text{NR}^{11})-$ , wherein  $\text{R}^{11}$  is as defined above;

T is  $-\text{R}^{12}$ ,  $-\text{alkyl}-\text{R}^{12}$ ,  $-\text{alkenyl}-\text{R}^{12}$ ,  $-\text{alkynyl}-\text{R}^{12}$ ,  $-\text{OR}^{12}$ ,  $-\text{N}(\text{R}^{12})_2$ ,  $-\text{C}(\text{O})\text{R}^{12}$ ,  $-\text{C}(\equiv\text{NOalkyl})\text{R}^{12}$ , or



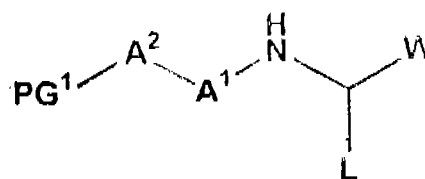
$\text{R}^{12}$  is hydrogen, aryl, heteroaryl, cycloalkyl, heterocyclalkyl, cycloalkylidenyl, or heterocycloalkylidenyl, and is optionally substituted with 1–3 J groups, or a first  $\text{R}^{12}$  and a second  $\text{R}^{12}$ , together with the nitrogen to which they are bound, form a mono- or bicyclic ring system optionally substituted by 1–3 J groups;

$\text{R}^{10}$  is alkyl, cycloalkyl, aryl, aralkyl, heterocyclalkyl, heterocyclalkylalkyl, heteroaryl, heteroaralkyl, carboxyalkyl, or carboxamidoalkyl, and is optionally substituted with 1–3 hydrogens J groups;

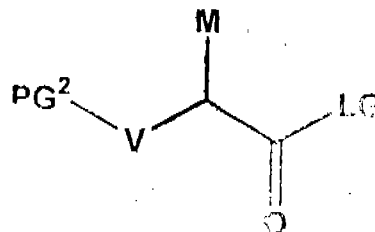
$\text{R}^{15}$  is alkyl, cycloalkyl, aryl, aralkyl, heterocyclalkyl, heterocyclalkylalkyl, heteroaryl, heteroaralkyl, carboxyalkyl, or carboxamidoalkyl, and is optionally substituted with 1–3 J groups; and

$\text{R}^{16}$  is hydrogen, alkyl, aryl, heteroaryl, cycloalkyl, or heterocyclalkyl;

comprising the step of reacting a compound of formula iii) :

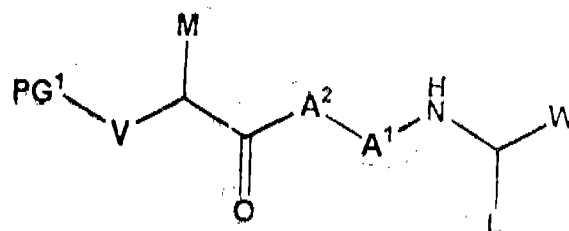


with a compound of formula (IV) :



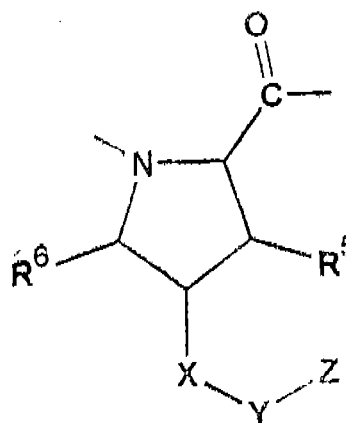
in the presence of a coupling reagent;

provided that when V is O, S, or  $-\text{N}(\text{R}^{11})-$ , the process optionally comprises the further step of reacting a compound of formula (V) :

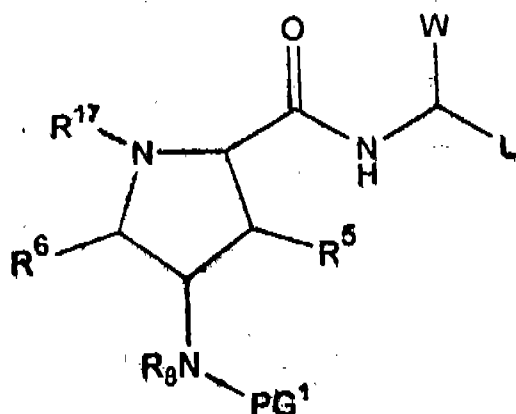


with a compound of formula (VI) LG-KT, in the presence of a coupling reagent;

provided that when  $\text{A}^1$  is :

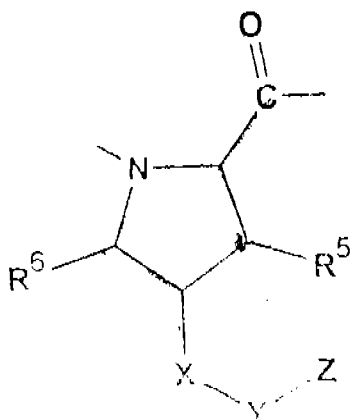


wherein X is O, S, or  $-\text{N}(\text{R}^6)-$ , the process optionally comprises the further step of reacting a compound of formula (VI)

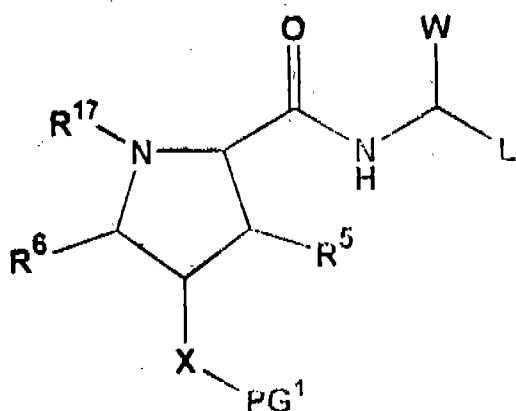


with a compound of formula (VIII) : LG-YZ, in the presence of a coupling reagent;

and provided that when A<sup>1</sup> is :



wherein X is  $-\text{N}(\text{R}^6)-$  and Y is  $\text{CH}_2$ , the process optionally comprises the further step of reacting a compound of formula (IX) :



with a compound of formula (X) :  $\text{Z}-\text{C}(\text{O})\text{H}$  in the presence of a reducing agent;

wherein :

each  $\text{PG}^1$  is independently hydrogen or an appropriate protecting group;

each LG is independently an appropriate leaving group which is optionally generated in situ;

$\text{PG}^2$  is  $-\text{KT}$ , hydrogen, or an appropriate protecting group; and

the other substituents are as defined above;

provided that when  $\text{PG}^1$  or  $\text{PG}^2$  is an appropriate protecting group, the process optionally comprises reacting the compound comprising the protecting group in the presence of a deprotecting reagent.

(Compl. Specn, 127 pages;

Org. Nil)

Ind. Cl. : 32F2C

183121

Int. Cl. : C 07 C 273/04.

A REACTOR FOR PRODUCING UREA AND A METHOD FOR THE SAME.

Applicant : UREA CASALE S.A., VIA DELLA POSTA 4, CH-6900 LUGANO, SWITZERLAND, A SWISS COMPANY.

Inventors :

1. MARIO DENTE.
2. SERGIO BOZZANO.

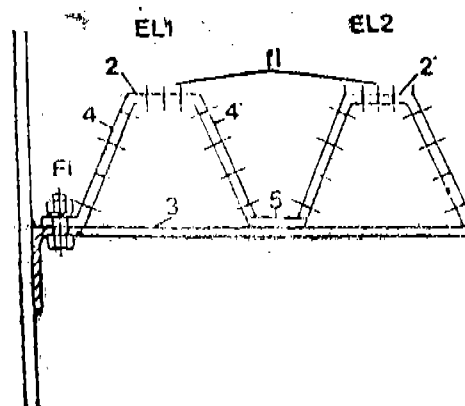
Application No. 24/Mas/92 filed on 14th January, 92.

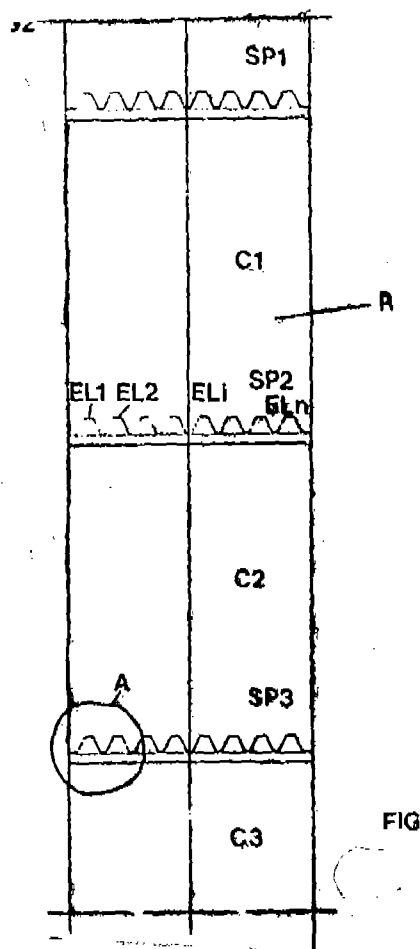
Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Chennai Branch.

### 19 Claims

A reactor (R) for producing urea from ammonia and carbon dioxide at high pressure and temperature, said reactor (R) comprising an internal space for containing cocurrent upward flows of a continuous liquid phase including ammonia and a dispersed gas phase including carbon dioxide, said internal space being divided into a plurality of compartments (C1 - C3) by means of a plurality of baffles (SP1 - SP3) to avoid excessive mixing of the liquid phase and to redistribute the gas phase in bubbles of a size suitable for increasing heat and mass transfer between the liquid phase and the gas phase; wherein a least one of said baffles (SP1 - SP3) comprises : a plurality of first openings (F1) having a first predetermined size suitable for flowing predominantly the liquid phase therethrough; and a plurality of second openings (S1) having a second predetermined size suitable for flowing predominantly the gas phase therethrough; the first openings (F1) favouring flow therethrough of the liquid phase substantially free of gas bubbles and the second openings (S1) favoring flow therethrough of the gas phase substantially free of the liquid phase, whereby each of the liquid phase and the gas phase are distributed through the reactor (R) in a substantially even, continuous and permanent flow.

Agent : M/s, Depenning & Depenning.





FIG

(Compl. Specn. 23 pages;

Drgs. 2 sheets)

Ind. Cl. : 108 CS.

183122

Int. Cl.<sup>4</sup> : C 21 C 3/00.

METHOD OF PRODUCING A FERROUS BASE METAL STRUCTURE HAVING WEAR RESISTANT OVERLAIN LAYER AND A FERROUS BASE METAL STRUCTURE PRODUCED THEREBY.

Applicant : KURIMOTO, LTD., A JAPANESE CORPORATION  
12-19 KITAHORIE 1-CHOME, NISHIKU,  
OSAKA, JAPAN.

Inventor : 1. TOSHIYUKI ASHIDA.

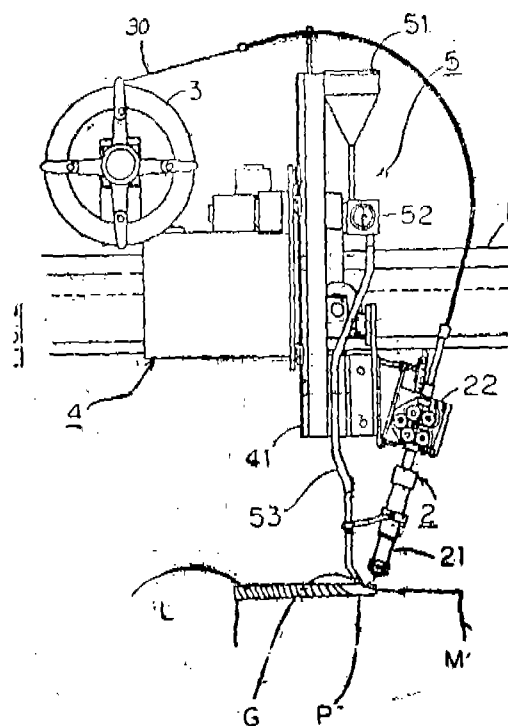
Application No. 122/Mas/92 filed on 2nd March, 1992.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Chennai Branch.

## 5 Claims

A method of producing a ferrous base metal structure having a wear resistant overlaid layer comprising the steps of depositing a wire of the desired composition to form a matrix on the ferrous base metal shielded in a non-acid atmosphere, adding a sintered hard alloy of 0.5 to 3.0 mm particle diameter into the molten pool of the said matrix at a fixed rate, and dispersing the said sintered hard alloy particles into the said matrix to form a composite structure, the said sintered hard alloy particles occupying 30 to 70% by weight of the said overlaid layer.

Agent : M/s. Depenning & Depenning.



( Compl. Specn. 22 pages;

Drgs. 2 sheets)

Ind. Cl. : 172 D 4

183123

Int. Cl.<sup>4</sup> : D 01 H 4/48.

A METHOD OF PRODUCING YARN AND AN OPEN  
END SPINNING DEVICE FOR THE SAME.

Applicant : SCHUBERT & SALZER MASCHINENFAB-  
RIK AG, POSTFACH 260, 8070 INGOLSTADT, FEDE-  
RAL REPUBLIC OF GERMANY (A GERMAN COM-  
PANY).

Inventors :

1. MAYER, WALTER.
2. POHN, JOHANN.
3. SCHNEIDER, GOTTFRIED.

Application No. 134/Mas/92 filed on 6th March, 1992.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Chennai Branch.

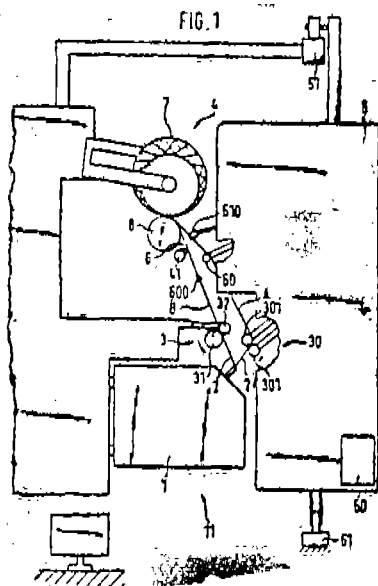
## 11 Claims

Method of producing yarn on an open-end spinning device incorporating the step of winding a yarn on a conical bobbin or tube after bobbin exchange or yarn breakage in which the yarn to be laid on the bobbin is guided to and fro by a yarn guide and, for bobbin exchange or in the event of yarn breakage, the laying of the yarn along the bobbin is temporarily interrupted and, after removal of the interruption, the yarn is transferred onto the yarn guide and laying of the yarn on the bobbin is—recommended, characterized in,

that, after being gripped by the yarn guide, the yarn is guided by it firstly in the direction toward the smaller diameter of the bobbin or tube, before the to and fro laying of the yarn over the entire bobbin width of the bobbin or tube takes place.

Ref. German Patents : 2850729, 1785153 & 2541589.

Agent : M/s. Depenning & Depenning.



(Compl. Specn. 23 pages;

Drwgs. 4 sheets)

Ind. Cl. : 107 C, G

183124

Int. Cl.<sup>7</sup> : F 16 J 15/00.

#### A MULTIPLE DENSITY GASKET.

Applicant : DANA CORPORATION, A CORPORATION, OF THE STATE OF VIRGINIA 4500 DORR STREET, TOLEDO, OHIO, 43625, USA.

Inventor : MICHAEL J. KESTLY.

Application No. 208/Mas/92 filed on 3rd April 1992.

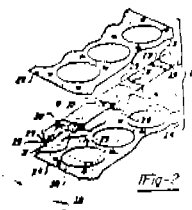
Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Chennai Branch.

#### 5 Claims

A multiple density gasket comprising a generally planar body having an outer circumference, said body being formed of a gasket material and having a first portion of a first density in a depth defined perpendicular to the plane of said body, a higher density portion of said gasket material being defined over a portion of said body, said higher density portion extending to at least two points on said outer circumference; said body being generally rectangular, and having two spaced axial ends and two spaced lateral sides, said higher density portion extending to said outer circumference at both of said spaced axial ends, said higher density portion extending over only a portion of the lateral width of said body, said higher density portion having a pair of linear lateral edges; said higher density portion being discontinuous in said axial direction, with openings formed through said body which separates said higher density portion into a plurality of axially spaced portions; and said gasket being defined by a plurality of layers, said higher density area defined by an additional layer of said gasket material which extends axially between said axial ends over a lateral distance which

is less than the lateral width of said body, and wherein outer layers are positioned on each side of said additional layer, and extend between the lateral edges of the gasket.

Agent : M/s. Depenning & Depenning.



(Compl. Specn. 12 Pages;

Drwgs. 2 Sheets)

Ind. Cl. : 39 C

183125

Int. Cl.<sup>7</sup> : C 07 C 126/02.

#### A PROCESS FOR PRODUCING UREA BY SYNTHESIS FROM AMMONIA AND CARBON DIOXIDE.

Applicant : SNAMPROGETTI S.P.A., A COMPANY ORGANIZED UNDER THE LAWS OF THE ITALIAN REPUBLIC OF CORSO VENEZIA, 16, MILAN, ITALY.

Inventors :

1. FRANCO GRANELLI.
2. GIUSEPPE CARLONI.

Application No. 160/Mas/92 filed on 16th March, 1992.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Chennai Branch.

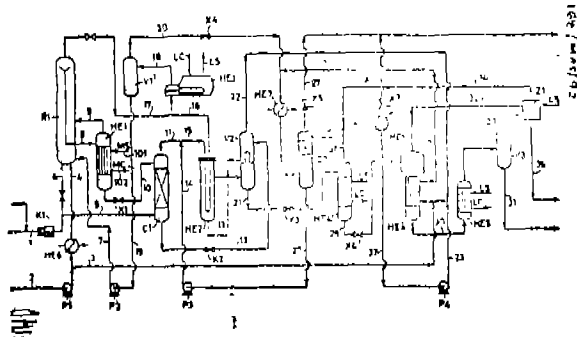
#### 10 Claims

A process for producing urea by synthesis from ammonia and carbon dioxide in which the synthesis reactor  $R^1$  operates with a  $\text{NH}_3/\text{CO}_2$  molar ratio of between 2.5 and 5 at a temperature of 175–220°C and preferably 185–200°C, and at a corresponding pressure of 13–23 MPa, to produce a urea solution, the urea solution then being subjected in a first decomposer  $HE1$  to decomposition, under externally supplied heat, of that carbamate which has not undergone dehydration to urea, said first decomposer operating substantially at the same pressure as the synthesis reactor, the decomposition products being recycled to the synthesis reactor in the gaseous phase, the urea solution produced by the first decomposer operating at 200–210°C, having a ratio of the  $\text{NH}_3$  to the  $\text{CO}_2$  unconverted to urea of between 6 and 12 and preferably between 8 and 10, being fed to a treatment section to remove the dissolved free ammonia from it, and then to one or more sections for the thermal decomposition and condensation of the residual ammonium carbamate, two section operating at medium pressure (1–4 MPa) and at low pressure (0.3–0.5 MPa), characterised in that :

- the urea solution leaving the first decomposer at the same pressure at the synthesis pressure is treated in an adiabatic stripping column  $C1$  in countercurrent with a prevalent part of the feed  $\text{CO}_2$ , namely more than 70% of the carbon dioxide feed, operating at a pressure which is 1–7 MPa less than the synthesis pressure;
- the vapour phase produced in said adiabatic stripping is mixed with the recycle carbamate solution produced in the first of the successive carbamate condensation stages and is then condensed in at least two condensation zones  $HE2$ , and  $HE3$  in series, of which the first partially condenses and the second completes the condensation of the carbamate, they operating substantially at the same pressure to produce a condensate which is recycled at liquid phase to the synthesis reactor;

- the urea solution obtained from the adiabatic stripping with carbon dioxide and having a molar ratio of the ammonia to the carbon dioxide unconverted to urea of between 2.0 and 4.0 is fed to a second thermal decomposition stage in the separator V2 operating at 1.4 MPa, the heat required for this decomposition being provided by the partial condensation in said heat exchanger HE2.

Agent : M/s. Depenning & Depenning.



(Compl. Specn. 26 Pages;

Drwg. 1 Sheet)

Ind. Cl. : 116 F

183126

Int. Cl.<sup>1</sup> : B 66 B 13/00.

#### DOOR DRIVE DEVICE WITH LATCHING MECHANISM FOR LIFTS.

Applicant : INVENTIO AG, SEESTRASSE 55, CH-6052, HERGISWIL (SWITZERLAND) A SWISS COMPANY.

Inventors :

1. JOSEF HUSMANN.
2. FRANZ WEINGARTNER.

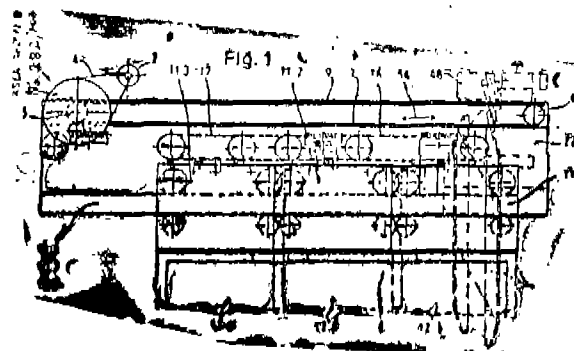
Application No. 217/Mas/92 filed on 8th April 1992.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Chennai Branch.

#### 7 Claims

Door drive device with latching mechanism for lifts, the lifts having a cage door, connectible through a counting mechanism with a shaft drive and movable in the region of the storeys by a door drive (1), wherein the said coupling mechanism consists of an entraining member parallelogram (18) borne at a cage door leaf (11.1) and two coupling rollers (19, 20) positioned at each shaft door and the said door drive (1) comprises a drive motor (2) located above the cage, an intermediate gear (3) and a belt-shaped drive means (7), connected through an actuating organ with the cage door and fixes the cage door in the closed and in the open setting and the latching mechanism comprises a pivotably borne door latch (46) monitored by a safety contact (53), and is arrestable at an abutment, latches by its own weight in a retaining position and urgeable by an actuating equipment into a releasing position, the said actuating organ attached to the cage door is a control cam (15), which actuates the entraining member parallelogram (18) by way of a pull rod (36), is borne to be rotatable at a sliding carriage of a sliding door leaf (12.1) and is articulately connected with the drive means (7) by way of a toggle lever (14) and that a roller (27), on which the outline of the control cam (15) rolls along, is borne to be rotatable and non-displaceable at a sheet metal carrier (9) on the closing side.

Agent : M/s. Depenning & Depenning.



(Compl. Specn. 19 Pages;

Drwgs. 5 Sheets)

Ind. Cl. : 85 C, K, Q.

183127

Int. Cl.<sup>1</sup> : F 27 B-7/32, 7/34, 7/36  
F 27 D-13/00.

#### BURNER FOR A ROTARY KILN.

Applicant : F. L. SMIDT & CO. A/S A DANISH JOINT STOCK COMPANY VIGE RSN EV ALLE 77, DK-2500 VALBY DENMARK.

Inventor : I. IB OHLSEN.

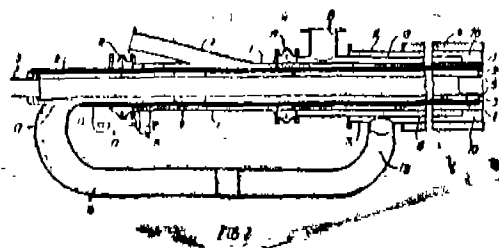
Application No. 213/Mas/92 filed on 7th April 1992.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Chennai Branch.

#### 5 Claims

A burner for feeding a solid and a liquid or gaseous fuel into a burning zone of a kiln, e.g. a rotary kiln, the burner comprising a central fuel supply pipe (5) for liquid and/or gaseous fuel, a first concentric pipe (8) surrounding the central pipe so as to form between the concentric pipe and the central pipe an annular channel for feeding primary air supplied to the burner through an inlet (10) into the burning zone, and a second concentric pipe (1) surrounding the first concentric pipe so as to form another annular channel between the first and the second concentric pipes for pneumatic feeding of solid fuel into the burning zone, e.g. coal dust, supplied to the burner together with a carrier air through an inlet (2), characterized in that the end of the pipe (8) facing the burning zone is closed by a plate-formed ring (6) fixedly mounted on the pipe end and provided with a number of nozzles (3), the axes of the nozzles being parallel to the axis of the burner, that the surface of the ring (6) facing the pipe end (5) is provided with a helical toothing (4''), whereas the surface of the ring facing the burning zone forms a divergent opening for the pipe (5), that a bush (7) provided with slots and which surrounds the pipe (5) is welded to the inner side of the ring (6), that the pipe (5) at its end facing the ring is likewise provided with a helical toothing (4') which is complementary to the toothing (4'') on the ring (6), that the pipe (5) is rotatably mounted and due to an axial spring bias working in the direction towards the burning zone is caused to bear against the surface of the ring (6) facing away from the burning zone, and that a turning of the pipe (5) causes the toothings to provide slot-formed, tangentially directed openings (4) for passage of primary air from the primary air channel into the central pipe (5).

Agent : M/s. De Penning & De Penning.



(Compl. Specn. 15 Pages;

Drwgs. 3 Sheets)

Ind. Cl. : 15 D

183128

Int. Cl.<sup>4</sup> : F 16 C 33/00.**MAGNETIC SEAL FOR SEALING A ROTATING SHAFT.**

Applicant : INPRO COMPANIES, INC., AN IOWA CORPORATION, 3407 78TH AVENUE WEST, ROCK ISLAND, ILLINOIS 61201, U.S.A.

Inventors :

- (1) DAVID C. ORLOWSKI,
- (2) HEINZ P. BLOCH.

Application No. : 220/Mas/92 filed on 9th April, 1992.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Chennai Branch.

**17 Claims**

A magnetic seal for sealing a rotating shaft existing a housing comprising :

a housing;

a shaft extending through said housing;

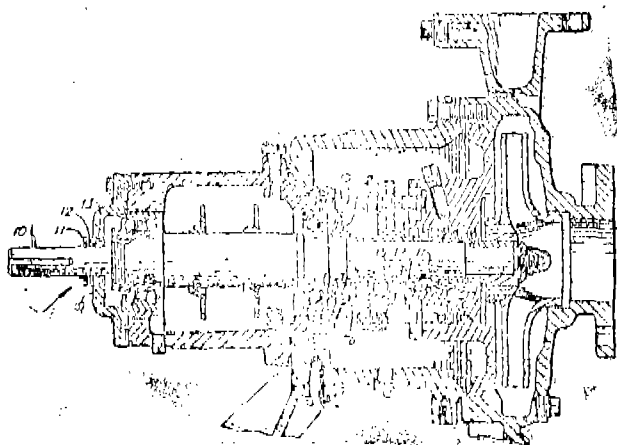
a first annular member surrounding said shaft having a source of magnetic force secured therein with the magnetic force applied axially, means for securing said first annular member to said shaft;

a second annular member surrounding said shaft having a source of magnetic force secured therein with the magnetic force being of like polarity to said magnetic force in said first annular member and applied axially to repel said annular members, means for sealing said second annular around said shaft;

a sealing face surrounding said shaft on the side of said second annular member opposite from said first annular member;

drive means for rotatively connecting said first and second annular members;

a stationary insert positioned in said housing surrounding said shaft and sealed to said housing, said insert having a face perpendicular to said shaft and aligned with said sealing face and said second annular member, said repelling magnetic forces forcing said sealing face into compressive contact with said face on said stationary insert to seal said housing.



Agent : M/s. De Penning &amp; De Penning.

(Compl. Specs. : 18 pages; Drwgs. : 3 Sheets)

Ind. Class : 40 A 1

183129

Int. Cl.<sup>4</sup> : C 07 C 67/00

B 01 J 19/26.

**A REACTOR FOR PERFORMING HETEROGENEOUS PHASE REACTIONS.**

Applicant : HULS AKTIENGESSELLSCHAFT, OF 4370 MARL 1, KREIS RECKLINGHAUSEN, GERMANY, A GERMAN COMPANY.

Inventors :

- (1) BERNHARD PIOTROWSKI,
- (2) HERMANN-JOSEF KORTE.

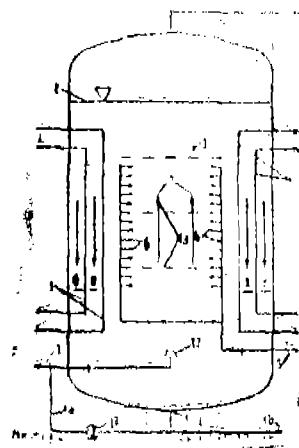
Application No. : 239/Mas/92 filed on 23rd April, 1992.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Chennai Branch.

**08 Claims**

A reactor for performing a heterogeneous-phase reaction between at least one liquid reactant and at least one gaseous reactant comprising a reactor of substantially cylindrical shape having an axis, a sidewall, an upper portion and a lower portion; liquid inlet means for introducing at least one liquid reactant; means for introducing at least one gaseous reactant, positioned above said liquid inlet means; means for dispersing gaseous reactant positioned above said liquid inlet means; heat exchange means positioned within said reactor adjacent to said sidewall; liquid outlet means positioned in said lower portion; and gas outlet means positioned in said upper portion, said liquid inlet means and said reactor of cylindrical shape forming a first region of substantially upward-directed fluid flow along said axis and in fluid communication therewith along the length of said first region, a second region of substantially downward-directed fluid flow adjacent to said sidewall.

Agent : M/s. De Penning &amp; De Penning.



(Compl. Specs. : 15 pages;

Drwgs. : 01 Sheet)

Ind. Cl. : 99 E

183130

Int. Cl.<sup>4</sup> : B 65 D 21/02.**LARGE-CAPACITY BLOW-MOULDED LIDDED DRUM.**

Applicant : MAUSER-WERKE GMBH, SCHILDGES-STR. 71-163 5040 BRUHL GERMANY, A GERMAN COMPANY.

Inventors :

- (1) DR. MARTEN BURGDARF,
- (2) DIETMAR PRZYTULLA.

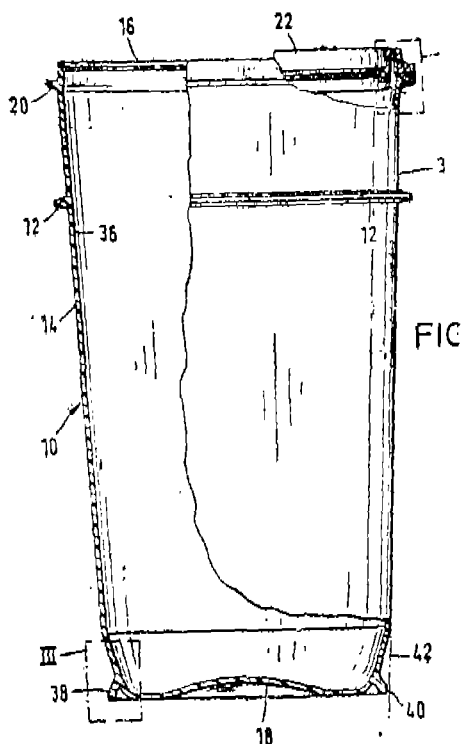
Application No. : 280/Mas/92 filed on 12th May, 1992.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Chennai Branch.

## 11 Claims

A large-capacity blow-moulded lidded drum made of thermoplastic for storing and transporting hazardous liquid or solid contents, having a substantially conical drum body (10) with conical drum wall (14), the said drum body having on its outer wall in the vicinity of the upper charging opening (16), a circumferential upper first surface flange (20) for the gas-and liquid-proof fastening of a drum lid (22) by means of an overlapping tension ring (30), a stacking rim being provided on the outer wall of the drum body (10) in the region of the upper third of the drum (34) to allow a plurality of such conical lidded drums to be stacked one inside the other, wherein the stacking rim makes the form of a second, substantially radially projecting surface flange (12) extending around the entire circumference.

Agent : M/s. De Penning & De Penning.



(Compl Specs. : 20 pages;

Drgns. : 4 Sheets)

## CLAIM U/S 20(1)

In pursuance of leave granted under Section 20(1) of the Patents Act, 1970, application No. 171223 (Application No. 777/Del/87) of NAUCHNOPROIZVOdstVENNOE OBIEDINENIE "MEDINSTRUMENT", of the Ulitsa K. Tinchurina, 31 Kazan, U.S.S.R., has been allowed to proceed in the name of RAISA VLADIMIROVNA GAINUTDI-NOVA, of 80, Kv. 15, Ulitsa Spartakovskaya, Kazan, U.S.S.R.

In pursuance of leave granted under Section 20(1) of the Patents Act, 1970, application No. 171226 (Application No. 791/Del/87) of NAUCHNOPROIZVOdstVENNOE OBIEDINENIE "MEDINSTRUMENT", of the Ulitsa K. Tinchurina, 31 Kazan, U.S.S.R., has been allowed to proceed in the name of RAISA VLADIMIROVNA GAINUTDI-NOVA, of 80, Kv. 15, Ulitsa Spartakovskaya, Kazan, U.S.S.R.

In pursuance of leave granted under Section 20(1) of the Patents Act, 1970 application No. 171285 (Application No. 776/Del/87) of NAUCHNOPROIZVOdstVENNOE OBIEDINENIE "MEDINSTRUMENT", of the Ulitsa K. Tinchurina, 31 Kazan, U.S.S.R., has been allowed to proceed in the name of RAISA VLADIMIROVNA GAINUTDI-NOVA, of 80, Kv. 15, Ulitsa Spartakovskaya, Kazan, U.S.S.R.

## CLAIM UNDER SECTION 20(1) OF THE PATENTS ACT, 1970

In pursuance of leave granted under Section 20(1) of the Patents Act, 1970 application No. 975/Cal/94 (182058) made by KERR-MCGEE CHEMICAL CORPORATION, has been allowed to proceed in the name of KERR-MCGEE CHEMICAL LLC.

In pursuance of leave granted under Section 20(1) of the Patents Act, 1970 application No. 976/Cal/94 (182207) made by KERR-MCGEE CHEMICAL CORPORATION has been allowed to proceed in the name of KERR-MCGEE CHEMICAL LLC.

## OPPOSITION PROCEEDINGS

An opposition entered by M/s. Unique Pharmaceutical Laboratories Limited, Mumbai to the grant of a patent to the application No. 176188 (730/Cal/93) has been dismissed.

## AMENDMENT PROCEEDING UNDER SECTION 57

The amendments prepared by E. J. DU PONT DE NEMOURS AND COMPANY, in respect of Patent Application No. 180178 (398/Cal/95) as advertised in Part-III, Section-2 of the Gazette of India on 12-12-1998 and no opposition being filed within the stipulated period, the said amendments have been allowed.

## CESSATION OF PATENTS

166314 166358 166363 166468 166479 166544 166551 166572  
166588 166592 166656 166705 166729 166733 166757 166766  
166773 166779 166801 166823 166828 166845 166848 166873

## RENEWAL FEES PAID

176075 178210 178429 178430 169680 169472 171560 169777  
169778 169779 176228 166633 164987 167377 167696 168444  
166798 175991 171528 175660 177665 177660 178363 177481  
180650 165823 172992 178439 178671 170641 181466 174695  
178668 181328 178720 165208 175335 168115 168659 174715  
164404 177801 171809 179363 169774 177846 171867 175214  
178422 168114 173045 177338 177668 179024 169691 176982  
177617 174367 181640 173479 181354 176499 181380 181377  
181360 181448 180703 178243 175545 177539 172800 181515  
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181461 181609 181707 175823 176627 175636 177558 179233  
168156 177796 174670 169695 173310 181569 181598

## PATENT SEALED ON 13-08-99

171223 171226 171285 176670\*D 180379\*D 181648 181741  
181765\* 181893 181894 181903 181904 181906 181907\*  
181908\*D 181912 181913 181914 181917 181918\*F 181919\*D  
181923 181924 181925 181926 181927 181928\* 181929\*

181930\*D 181931 181933 181934 181937\*F 181938\*  
 181939\*D 181940\*D 181941 181942 181943 181944 181945  
 181946\*D 181947\*F 181948\*F 181949\*F 181950\*D 181951  
 181952 181953 181955 181957 181959 181960 181962\*  
 181963 181964 181965 181966\* 181967 181968\* 181969\*F  
 181970\*D 181971 181972 181973\* 181974 181975 181976  
 181977 181978 181979 181981 181982 181983 181984 181985  
 181987 181988 181989 181990 181991\* 181992 181993  
 181994 181995 181996 181997 181999\*D 182000\*D

CAL-36, DEL-03, MUM-05, CHEN-45

\*Patent shall be deemed to be endorsed with words  
 LICENCE OF RIGHT Under Section 87 of the Patents Act,  
 1970 from the date of expiration of three years from the  
 date of sealing.

D—Drug Patents.

F—Food Patents.

### REGISTRATION OF DESIGNS

The following designs have been registered. They are not  
 open to inspection for a period of two years from the date  
 of registration except as provided for in Section 50 of the  
 Designs Act, 1911.

The date shown in the each entries is the date of the re-  
 gistration included in the entries.

Class 1. No. 174825, Ess Kay Technocrats, an Indian part-  
 nership firm of 13, Saktigarh, Jadavpur, Calcutta-  
 700032, West Bengal, India, "LPG, FUEL SAV-  
 ING & ANTI POLLUTION DEVICE", 3rd  
 October 1997.

Class 3. No. 174335, Soehnle-Waagen GmbH + Co., a Ger-  
 man Company existing under the laws of Ger-  
 many, of Fornsbacher Strasse 27—35, D-71540  
 Murrhardt, Germany, "WEIGHING SCALE",  
 21st July 1997.

Class 3. No. 174339, Astra Aktiebolag, a Swedish Company  
 of S 151 85, Sodertalje, Sweden, "FLUID CON-  
 TAINER", 22nd July 1997.

Class 3. No. 174841, Kapoor Agencies, 4/1697, Mahavir  
 Block, Bhola Nath Nagar, Oppt. Jain Mandir,  
 Shahdara, Delhi-110 032, India, an Indian part-  
 nership firm, "BED PAN", 7th October 1997.

Class 3. No. 174833, G. D. Pharmaceuticals Ltd., of Asha  
 Mahal, 94, Nalini Ranjan Avenue, Calcutta-53,  
 West Bengal, India, an Indian company,  
 "BOTTLE", 6th October 1997.

Class 3. No. 174834, Kemikox Formulators Pvt. Ltd., an  
 Indian company of 64/4A/1c, Dr. S. C. Banerjee  
 Road, Beliaghata, Calcutta-700 010, W. Bengal,  
 India, "CONTAINER", 7th October 1997.

Class 3. No. 174832, Hindustan Lever Ltd., of Hindustan  
 Lever House, 165-166 Backbay Reclamation,  
 Bombay-400 020, Maharashtra, India, "TOOTH  
 BRUSH", 6th October 1997.

Class 3 No. 174830, Pearl Polymers Ltd., 704, Rohit House,  
 3, Tolstoy Marg, New Delhi-110 001, India, an  
 Indian company, "JAR", 6th October 1997.

Class 3. No. 174828, Jineshwar Writing Instruments Pvt.  
 Ltd., of 104 Udyog Bhawan, Sharma Industrial  
 Estate, Valbhat Road, Goregaon (E), Mumbai-  
 400 063, Maharashtra, India, an Indian Company,  
 "BALL PEN", 6th October 1997.

Class 3. No. 174827, Ebel Polymers Pvt. Ltd., D. C. Dey  
 Road, North Tangra, Dhapa, Calcutta-700 039,  
 W. Bengal, India, an Indian Company, "DRAW-  
 ING TOOL", 3rd October 1997.

Class 10. No. 174334, Nikhil Footwear Ltd., an Indian com-  
 pany incorporated under the Indian Companies  
 Act, G-11, Udyog Nagar, Delhi, India, "SOLE  
 OF FOOTWEAR", 17th July 1997.

A. E. AHMED

Controller Genl. of Patents, Design &  
 Trade Marks

प्रबन्धक, भारत सरकार मद्रासालय, फरीदाबाद द्वारा मुद्रित

एवं प्रकाशन नियंत्रक, दिल्ली द्वारा प्रकाशित, 1999

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